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PRICES AND THE INTERNATIONAL MOVEMENT OF SPECIE.

1. THE quantity-theory of money has been long relied on in the received explanations of international trade and values. If compelled to reject this theory, are we obliged to restate the principles of international economics? While the quantity-theory is certainly incorrect, it does not follow, however, that the fundamental principles of international trade and values already accepted are unsound.

International exchange has often afforded a means, in other problems, of disentangling the true from the factitious, because in its very nature it cannot be influenced by local or territorial conditions. The elements of domestic and foreign trade are the same; and the word "international," after all, is only a name for conditions of trade with regions (even within the same country) between which there is no free movement of labor and capital.¹ Therefore, the process of price-making in the international field may throw into isolated clearness the agencies which are likely, also, to be true of price-making in domestic trade.

How are the prices of goods traded in, for instance, by England and the United States determined? If the quantity-theory has any universal validity as a general principle we should be obliged to apply it as follows: the quantity of money offered for goods is to be compared with the amount of transactions (rapidity of circulation both of money and of goods being allowed for). What, in this point of view, would be the quantity of money which could serve as a demand for the goods passing to and fro between England and America? Is it the quantity of money in England, or that in the United States? Or, is it the amount afloat which is carried back and forth? Of course, no such absurd method of determining prices in international trade has ever been, or could be, attempted. In the

¹ Cf. CAIRNES, *Leading Principles*, etc., p. 306.

international field, of all places, goods (in order to obtain their prices) are not compared with any vague quantity of a medium of exchange; inevitably the comparison is made between the particular goods and some accepted money-metal, like gold, in the weight of which the values of goods in different places and countries can be compared. The insufficiency of the quantity-theory, when applied to international trade, is too apparent to need statement; yet one may doubt if it is any more absurd to try to compare the mass of goods with the media of exchange in international trade in order to determine their prices, than it is to apply that method of price-making to goods and the media of exchange within a country. Indeed, it is seen by most writers that the relative values of goods between different countries are fixed by reciprocal demand, held in at opposite limits by expenses of production; a seller in one country will not sell below his necessary expenses of production, but he will sell for as much more as the reciprocal demand between foreign and domestic dealers will permit. The relative values of the goods being thus determined, what is the means of evaluation of these international goods in gold? That it is not by comparison with the international media of exchange, must be at once admitted; since it is almost universally acknowledged that exports pay for imports, and that it is a barter of goods against goods. In short, the general principles regulative of prices within a country are practically those which seem to be admitted to be in force in international price-making: given the world-value of gold (as determined by the world's demand and supply), goods are expressed in gold in proportion (cost of carriage apart) to their relative expenses of production, modified by fluctuations of demand and supply.

2. The quantity-theory, however, has been used in the study of international values in quite another form than that referred to above. In the historical development of thinking on international trade and the movement of the precious metals, it will be remembered that the usually accepted exposition in general

treatises of political economy, with only few exceptions, even to the present day, conforms to the principles laid down by Ricardo (and later expanded by Mill). The theory of foreign exchanges, and the movement of exports and imports, in Ricardo's system were intimately associated with the quantity-theory of money; hence its appearance in our latter-day thinking. In brief, the classical theory may be stated as follows:

Starting with the trade between England and the United States *in equilibrio*, so that the exports exactly pay for the imports, and so that each country has that part of the money-metal in the world which is in the proportion of its transactions to those of other countries, suppose a new export from England to the United States of nitrate (due to discovery). The imports of American goods into England will no longer pay for the exports to the United States; more bills of exchange on the United States are offered for sale in England, and the price of exchange goes to the shipping point, so that (provided the United States can sell England no additional merchandise, or securities, with which to pay for the new nitrate) specie is imported from the United States to England in an amount sufficient to pay for the new exports. This new supply of the money-metal, added to the circulation of England, would (according to the quantity-theory) raise the general level of prices in England. But the United States, or any other country buying the new nitrate, would have lost specie, lowered the quantity of her circulation, and consequently caused a fall in general prices at home. Hence, goods, which before would not have been exported from the United States, could now, at the lowered prices, be marketed in England, where all prices have risen. Likewise, high general prices in England will tend to check her exports to the United States (and to other countries). Thus forces are automatically set in motion, by the initial sending of specie, which will alter the relation of the amount of the exports and imports of England, until they again pay for each other. In the end, England has more specie than before, and other countries less; prices are slightly higher in England than before, and less in other countries.

3. Since it is our purpose to discuss the theory of prices, we must not be drawn off into any inquiry (no matter how tempting) into international values.

The immediate question is the effect of the addition to, or the subtraction of, specie upon the levels of prices in the trading countries. There are evident difficulties in using the classical theory whenever we try to explain modern conditions. In the first place, the action of the international markets, with telegraphic quotations from every part of the world, precludes the supposition that gold prices could in general remain on a higher level in one country than another (cost of carriage apart) even for a brief time. In the second place, one country is trading with many other countries; and even if that one received much gold, it would probably have come (even through some financial arbitrage center) from all the countries it traded with (in its new exports). Thus no fall of prices may take place in the importing countries, of such a nature that the international movement of goods is needed to again bring about equilibrium. In the third place, the theory seems to regard the local value of gold as causing a change of prices within a country, while the value of gold is an affair of a world-demand and a world-supply. In the fourth place granting a world-value of gold, in which the comparative prices of goods are expressed, the reason for exporting or importing certain goods depends upon internal conditions touching expenses of production within a country; that is, it is the relative expenses of production, and comparative prices, of goods within a country, and not the general level of prices, which causes international trade. To be sure, a fall of general prices might bring some new article so low that in comparison with some other, it might enter the international market. But, in any case, the change of price must be comparative, and not general; and it must usually be in reverse order to the comparative prices in other countries, so that the direct comparison between the price of a particular commodity desired for export must show an absolutely lower quotation (exceeding cost of carriage) than the same article in the country by which

it is imported.¹ Hence, the causes permitting a new export are individual and not general; are due to relative expenses of production or to changes in relative demand and supply, and not to a general change of prices; and they are really antecedent to any movement of specie. In the fifth place, it does not at all follow that the importation of the money-metal, which is used as the standard of prices in the importing country (the same which may have sent out the nitrate, or any new export) will pass into use as a medium of exchange, and, by being offered against goods, will raise general prices; and yet, according to the usual statement of the quantity-theory, this is the only way in which the imported specie can affect prices.

It is interesting to note that Mr. Nicholson, who, in his special discussions on money, has strongly supported the quantity-theory, is quite ready to throw it overboard in his treatment of international values. He finds it impossible to accept the clas-

¹ Mr. Nicholson has seen the truth that the readjustment of exports and imports is not produced by the operation of a general rise, or fall, of prices and shows the *reductio ad absurdum* in this passage of Mill: "It is no sufficient ground of apprehension to the English producers to find that some other country can sell cloth in foreign markets at some particular time a trifle cheaper than they can themselves afford to do in the *existing state of prices* in England. Suppose them to be temporarily unsold, and their exports diminished; the imports will exceed the exports, there will be *a new distribution of the precious metals, prices will fall*, and as all the money expenses of the English producers will be diminished, they will be able (if the case fall short of that stated in the preceding paragraph) again to compete with their rivals."—MILL B. III, chap. xxv, § 1. [The italics are Mr. Nicholson's.] That foreign cloth may for a time undersell English cloth, owing to various temporary conditions, every one will admit, and also that the English exporters may again recover their markets when these conditions have passed away; but to suppose that the recovery will take place by a general fall in the level of prices in England through the export of the precious metals in lieu of cloth is to mistake altogether the influence of general and special causes on prices. It is easy to bring the issue to a *reductio ad absurdum*. Suppose at the same time that the price of English cloth is above that of foreign cloth, the English and foreign prices of some other competing export, say linen, are exactly in the reverse position. In this case a balance will be due from England on account of the lessened export of cloth and to England on account of the lessened export of linen from foreign countries. As these debts will just cancel, no effect on general prices can take place, and the former condition of equilibrium could not be restored in the manner supposed.—NICHOLSON, *Principles of Political Economy*, Vol. II, p. 320.

sical explanation of the effect of imported, or exported, gold on prices :

It seems necessary, at any rate, to abandon the idea of a fall in general prices abroad ; for even supposing the new export is at first paid for in gold, the contraction of the world's currency would be relatively small compared with the increase in that of England.

But will general prices rise in England until some old exports become too dear ? This supposition seems similarly, if not equally extravagant ; for the gold sent on balance will find its way into the banking reserves, and, as Mill himself allows, will so far not affect prices directly.¹

Again general prices in England cannot rise above the general level of gold prices in the commercial world—after allowing for *quasi*-permanent causes of difference. But on Mill's view a rise in English prices sufficient to check exports and to increase imports would apply to the range of both, and for the trade to continue this change in price must be considered permanent. . . .

The notion that a new export can be obtained continuously only by an operation on the general levels of prices of one country and the rest of the world is suggestive of the primeval simplicity in which roast pig can only be obtained by a continuous series of conflagrations.²

4. Irrespective of any previous argument as to the soundness of the quantity-theory, sufficient reasons have been already mentioned to discredit its adequacy to explain the movement of exports and imports in international trade. No statistical evidence, in addition, can be adduced to show that prices are, or have been, raised or lowered by the importation or exportation of gold into or from a country. To say that prices in general will fall in the United States today if gold is exported—that imports will thereby be increased, and exports decreased—does not explain the facts of our exports and imports ; nor is the movement of gold governed by any such rules as has been indicated in the classical theory. The movement of general prices in the United States is, and has been, quite independent of the impor-

¹Is not Mr. Nicholson at variance here with his beliefs elsewhere stated (*Monetary Problems*, pp. 73, 146) that prices are influenced through the quantity of bank reserves, because, as he says, credit "raises prices just as much as when ready money is offered" ?

²NICHOLSON, *Political Economy*, Vol. II, pp. 288, 289.

tation or exportation of gold. Of course it may be said that gold forms only a part of our media of exchange; but that does not help the case of the quantity-theory; for if we have the gold standard, and if gold-prices are unaffected by changes in the media of exchange, what then has become of the theory?

The most casual examination of statistics will show that the exportation and importation of our standard money-metal has had no appreciable effect on the movement of exports and imports of goods. Indeed, one feels compelled to apologize for introducing any evidence on this point. In the case of our trade from 1872 to 1880, gold was not the standard, hence the export and import of gold as merchandise could have had no importance; nor do the changes in the volume of the "currency" seem to explain the fall of prices:

Year.	Volume of Circulation.	EXCESS OF		Annual Index Number of Prices in Paper.	EXCESS OF	
		Exports over Imports Gold.	Imports over Exports Gold.		Exports over Imports Mdse.	Imports over Exports Mdse.
1872.....	\$738.3	\$40.8	\$....	\$138.8	\$	\$182.4
1873.....	751.8	36.1	....	137.5	....	119.6
1874.....	776.0	14.5	....	133.0	18.8	....
1875.....	754.1	53.2	....	127.6	....	19.5
1876.....	727.6	23.1	....	118.2	79.6	....
1877.....	722.3	.3	....	110.9	151.1	....
1878.....	729.1	....	4.1	101.3	257.8	....
1879.....	818.6	....	1.0	96.6	264.6	....
1880.....	973.3	....	77.1	106.9	167.6	....

But passing to a period in which there was a succession of imports of gold over exports, while gold was the actual standard (after January 1, 1879), it would be expected that the addition

Years.	Excess of Imports of Gold.	Exports of Merchandise.	Imports of Merchandise.	Prices.
1878.....	\$ 4.1	\$ 694.8	\$ 437.0	\$ 101.3
1879.....	1.0	710.4	445.7	96.6
1880.....	77.1	835.6	667.9	106.9
1881.....	97.5	902.3	642.6	105.7
1882.....	1.7	750.5	724.6	108.5
1883.....	6.1	823.8	723.1	106.0

of gold should have so raised prices in general that our exports should have diminished, and our imports increased. The revival of prosperity would alone on a sensible theory account for the imports; but instead of diminished exports there was an increase.

Taking another period in which there was a succession of exports of gold, one would expect to see, according to the classical theory, such a general fall of prices as should cause an increase of exports, and a diminution of imports, of merchandise. In fact, the exports of 1895 and 1896 are no greater than those of 1890 and 1891; while the imports have apparently not diminished. The panic of 1893 would alone account for the shrinkage of imports in 1894 and 1895.

Years.	Excess of Exports of Gold.	Exports of Merchandise.	Imports of Merchandise.	Prices, [†]
1889.....	\$ 49.6	\$ 742.4	\$ 745.1	\$ 94.2
1890.....	4.3	857.8	789.3	92.3
1891.....	68.1	884.5	844.9	92.2
1892....	.4	1030.3	827.4	94.9
1893.....	87.5	847.6	866.4	94.9
1894.....	4.5	892.1	654.9	87.3
1895.....	30.1	807.5	731.9	85.2
1896....	78.8	882.6	779.7	83.0

Such figures, however, are unsatisfactory, because there are many influences at work to affect the amount of our exports and imports of goods other than the international movement of gold. But, at least, they show that there is no response in the actual facts of the day to the attempt to apply the classical theory. There are, of course, very good reasons for this in the development of our resources, in the cheapening of our goods, the shipment of securities, the payment of ocean freights, the expenditure of travelers, and the items of the general financial account. Hence, no legitimate conclusion can be drawn from a table of merchandise movements alone.

5. Without further delay, it may now be permitted to pass to a statement of what seems, in my judgment, to be the true

[†] To 1891 from the Aldrich Report; after 1891 from Falkner's Table in the *Bulletin of the Department of Labor*, p. 263.

relation between prices and the international movement of gold.

The essential truth in international trade is the well recognized fact that imports are paid for by exports ; in this sphere, it is well understood that goods are exchanged against goods, and that the medium of exchange is merely a subsidiary agency devised for the convenience of the traders. In this respect, the character of international exchange does not differ from that of the great body of domestic transactions. In the case of the vast quantity of goods transferred by the deposit currency within a country, the essence of the operation is an exchange of goods against goods expressed in terms of gold by a medium of exchange which (under normal credit) has no influence upon the general prices of these goods ; in the case of a trade between foreign countries, the essence of the operation is an exchange of goods against goods, also expressed in terms of a given weight of gold, and the medium of exchange employed has likewise no influence upon the general prices of the goods. But in the latter case, as a necessary result of the nature of the trade, since it is carried on over considerable distances instead of within a given financial center, the medium of exchange employed is the bill of exchange, instead of the check and deposit system. Distance—or the conditions known as “international”—create a reason for the use of the bill of exchange, which differs in form and practical operation, but not in essence, from such a medium as a deposit-currency. Therefore, the influence of each on prices in two different fields of exchange is essentially the same.

In neither case is there any necessity for passing the actual standard metal as a medium of exchange in any one sale, or even for great masses of transactions. To an American house, its exports are credits, while the goods it imports are debits ; and to the great body of our people, our exports of goods are credits offset against our imports which are debits. Gold may be required only in settling balances ; but, as we shall see, not even the balances need be paid in gold. The same words might be used of goods bought and sold by the deposit-currency. In the field of foreign trade, it must, therefore, be evident to the most

superficial observer that the goods passing to and fro—or the money-work in—do not form a demand for all the “money” offered for the goods (after the way of the quantity theory); although supposedly paid for in each case by an order on “money,” the real payment for our exports is found in our imports. The money is not usually, or often, passed, even though each trader, on the face of things, sells or buys for “money,” and his goods are expressed in terms of “money.”

Through the use of bills of exchange it is not necessary that the international accounts should evenly balance at any given time; for a balance in favor of one house, or one country, may soon be changed into a balance in favor of the other. If A in London receives a cargo of wheat valued at \$10,000 from B in New York, later A may be sending to B machinery valued at \$12,000; then a balance of \$2,000 is due to A. But, meanwhile, B may have sent a cargo of raw cotton to A worth \$50,000; then the balance is reversed. In such a trade as this, specie is not sent back and forth for each shipment; the whole account is kept open and continued. The practical means of accomplishing this is by means of bills of exchange. For the first item, B has the right to draw on A for \$10,000 in London; but when he received the \$12,000 of machinery from A, B can assign to A the \$10,000 coming to him in London as part payment (thus owing only the balance of \$2,000). This assignment, when put into words, is a bill of exchange: it directs the buyer of the wheat (whoever he may be) to pay \$10,000 (or its equivalent in English gold) to A (or to any name, as the case may be), and charge it as an offset against B's debt to A. By this old and simple device, a part of the evolution by which the valuable standard metal has been saved from risk as a medium of exchange, gold is not sent across the Atlantic.¹

Foreign trade is, of course, not carried on only between two persons in London and New York, nor only between the United States and England, but between a great number of houses in

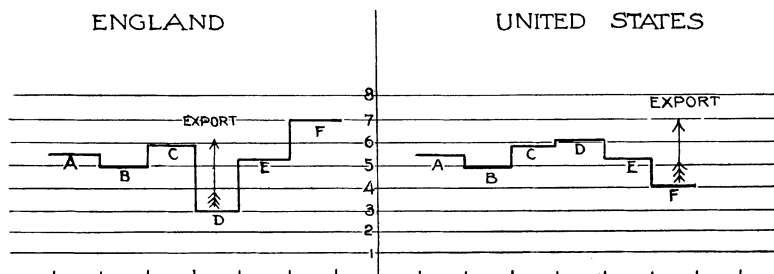
¹ Of course, the same general process obtains in settling accounts between cities within the same country, such as New York and Chicago, or New York and New Orleans.

the United States and houses in all parts of the world. The accounting, however, remains the same. The transactions of the many houses in London trading with the many in New York are all balanced against each other through the institutions that deal in bills of exchange. So, of all the trade between the United States and Great Britain; or between the United States and any other nation. Finally, through common financial centers, such as London, the claims of buyers and sellers of good repute in various nations are offset against each other. Therefore, so far as the merchandise account is concerned, it is evident that the existence of a balance is the consequence of the difference in the value of exports and imports; and since only the balances need, under any circumstances, be transmitted in gold, it becomes perfectly clear that the movement of gold is a result, not the cause, of the movement of goods in international trade. While this is but a simple statement of patent facts, it is to be observed that this is not the sequence of events set down in the quantity-theory, since that theory teaches that goods move after the change in the quantity of the circulation within a country has affected prices.

6. The movement of goods to and from a country, moreover, is due to influences affecting particular prices of goods, and not to those affecting general prices. In the subjoined diagram, on a scale of prices expressed in gold on the perpendicular line, let the broken lines indicate the general level of prices in England and the United States (leaving out cost of carriage for convenience). The commodities, A, B, C, and E have the same prices in both countries, and are therefore not traded in; but suppose that commodity D has for a time a price in gold of 3 in England (based on relative expenses of production to other English goods), while in the United States it bears a price in gold of 6 (having high expenses of production relatively to other American goods). Hence, commodity D will be exported to the United States. Similarly, in the United States, suppose commodity F

bears a price in gold of 4 (due to relatively less expenses of production than other American goods), while in England it bears a price of 7 (relatively to other English goods). Then, commodity F can be exported from the United States to England; and a trade can go on between the two countries in D and F.

If gold is sent at all, it is sent to pay for balances. The originating cause of the exports in both countries was a valuation in gold of goods relatively to each other (based in general on relative expenses of production, and demand and supply, within



each country). The cause of the international movement of goods was the difference in comparative costs as expressed in comparative prices (within each country); while the exact reverse was going on in the other of the two countries, so that a direct comparison of prices between the two countries allowed a profit on the trade. The shipment of gold, if any, was a consequence, not a cause, of the trade; and the prices giving rise to the trade were not due to the movement of the gold.

If a general fall of prices took place in England due to a change in the world's value of gold, they would fall similarly in the United States, and for the same reasons; relative prices in each country would remain exactly the same (unless the change, in some manner, altered relative expenses of production), and there would be no reason for any new exports or new imports.

Evidently, the classical theory counted on a change of all

prices in England in such a manner that the English level would be, for a time, higher or lower than the general level in the United States, and would, in this manner, occasion new exports, or new imports. This position, then, is based on the idea that gold can have a different value in one country than it has in another country; and that this difference is sufficient to cause a change in general prices. If prices in general fell one-half in England, and if they remained unchanged in the United States, there would be no profit in sending commodity B, for example, to America, if the return cargo was in goods (such as A).¹ Of course, if England will take no goods, but demands gold, England will gain the difference in price between the two countries.

In such a case, an enormous premium would exist on shipments only from England to the United States, and it would wholly stop all goods from leaving the United States for England. Such an extreme case shows how absurd it must be to reason on the supposition that gold prices can maintain a different level in different countries (cost of transportation and ordinary profit apart). The whole business world on both continents is always and actively at work to prevent any appreciable differences in the level of gold prices between commercial nations. A rise of price of any commodity due to local causes (such as deficient harvests, war, etc.) is instantly met by importations from other countries; indeed the actual event is more often discounted by shipments of goods.

A century or so ago, or even among existing nations having no rapid communication with commercial countries (if there are any such), perhaps prices might, unknown to traders, remain at different levels in different countries. In that case, if gold were also the sole medium of exchange, and if there were no free coinage, then possibly the level of prices might be raised or lowered in these detached and remote nations by the addition or subtraction of gold in international trade. But that would throw no light

¹ That is, 100 B formerly priced at 480, is now 240; and A is now one-half of 550, or 275. Carry 100 B to America where it sells for 480, and it would buy there only $\frac{2}{3}$ of A, or about 85. Take this 85 back to England where it will be worth only 233.75, or less than 240, the price of the 100 B, which was exported.

on our problem of today. That money which is the standard is little used among us as the actual medium of exchange ; and in these days the movement of the standard metal from place to place, does not necessarily change its world value ; its going in or out of a country may not practically touch the usual media of exchange (other than gold) by which goods within any country are transferred. So that, if gold were to move from one country to another, it does not follow that prices would be affected ; certainly not, if prices must depend (as in the quantity-theory) on the quantity of the media of exchange.

Finally, it is not conceivable that a different level of gold prices (supposing such a thing possible) in two modern commercial countries would be brought to a common level by the movement of gold from the place of high to the place of low prices. Between trading countries, as between different parts of the same country, the exceedingly keen competition of merchants in the leading centers would send the goods themselves to the spot where high prices existed, and by a quick increase of the supply of goods they will reduce prices in the country whose level was artificially high. A situation in which it is found that only gold can be exported is almost inconceivable ; for prices would at once fall by competition of goods with goods to a normal international level (allowing for differences due to cost of carriage, etc.) and there would be no profit in sending gold. In fact, in any reasonable case, an analysis inevitably brings us back to the exchange of goods against goods as the normal condition of all trade.

7. Thus far the discussion of the movement of gold and its effect on prices has proceeded on the supposition that exports and imports consisted only of merchandise. In actual fact, there never is any equilibrium in any country between the exports and imports of goods. Goods are not the only things of value exported and imported, which are used as credits and debits in international accounting. Securities, private and public, are constantly being sent to and from the United States and Europe

in enormous sums. These securities form the basis of bills of exchange exactly as if goods were shipped. Hence a large excess of exports from the United States may be covered by an unknown shipment of securities from Europe to us; and, by the bills of exchange the claims are offset so that no gold may be sent either way. In this case again, the movement of gold depends upon the previous movement of goods and securities. It is not the transmission of gold which first starts the exports or imports either of goods or securities.

Besides securities, the sums due by Americans for freights, the amounts to be paid on travelers' letters of credit, are offsets against our exports in all forms; and if we lend to foreigners, or buy their securities, we may be drawing only against the credits due us from our exports of goods. All our exports of goods plus our exports of securities or any form of obligations due to us, on the one hand, are to be offset against all our imports of goods, plus our imports of securities, etc., before it can be ascertained whether a balance of gold is due to or from us; and even then, the actual balances may not be sent in gold. So that the effect of a movement of gold upon prices in these days is practically *nil*. In fact, it has become clear, by the logic of events, that the shipments of gold between commercial countries has little or nothing to do with the level of prices of merchandise in any country.

8. The reason why even balances in favor of a country may not be paid in gold is due to the possibility of investing those balances at a higher rate of interest in a foreign country than can be obtained at home. The relative rates of interest have an influence even wider than that upon the movement of balances. It is the rate of interest upon sound international securities, as well as the rate in the loan market, which determines whether credits due, for instance, to the United States shall be left abroad or brought home in the form of goods or specie. The general accounting in foreign trade must include the operations of loans, and the movement of capital for investment from one country

to another. Indeed, the rate of interest is behind the movement of securities mentioned above. The purchase of securities is, of course, one form of investing capital. Therefore, in determining the causes affecting prices and the movement of gold in international trade, it must be kept in mind that the relative rates of interest in the trading countries will influence the passage of loanable capital to and fro, thereby acting as a factor in adjusting merchandise credits and debits, and seriously affecting the transmission of gold. Instead of gold being the originating cause of new exports and imports, as once generally held, it is the very last thing to move; and even then merchandise balances may be entirely reversed by changes in the rates of interest in New York or London which will cause capital to flow from the creditor to the debtor country. The recognition of the force exerted by the rate of interest on the movement of loanable capital gives the final *coup de grace* to the old theory, which based its change of general prices upon the international movement of specie. The order of events is quite the other way: relative prices cause exports and imports of goods; and the shipment of gold is not made to cover balances of merchandise. If gold moves, it goes not merely because of the account in goods and securities, but of the investment of international capital. What Mr. Mill saw dimly in his day is now well understood.¹

In the seven years, 1894-1900, the total excess of our exports over imports of goods was \$2,391.7 millions;² and yet,

¹ It is a fact now beginning to be recognized that the passage of the precious metals from country to country is determined much more than was formerly supposed by the state of the loan market in different countries, and much less by the state of prices.—B. III, chap. viii, § 4.

² (00,000 omitted.)

	Total Exports, Merchandise.	Total Imports, Merchandise.	Excess of Exports over Imports, Merchandise.
1894.....	\$892.1	\$654.9	\$237.2
1895.....	807.5	731.9	75.6
1896.....	882.6	779.7	102.9
1897.....	1,050.9	764.7	286.3
1898.....	1,231.5	616.0	615.4
1899.....	1,227.0	697.2	529.8
1900.....	1,394.4	849.9	544.5
Total.....	\$7,486.0	\$5,094.3	\$2,391.7

in the first three years, we also exported \$113.4 millions of gold.¹ In 1897-99 we imported \$200.9 millions of gold. We had sold goods and securities for which other countries must pay us; they had bought of us more goods than we had bought of them. We had the choice of realizing on our foreign credit either in goods, securities, or gold. The reason why some gold was shipped to us in 1897-99 was that at the prices set by foreigners on their goods and securities we did not care to purchase more than we did; and the balance was paid in gold. If foreigners had offered their securities (or American securities held by foreign investors) cheaper, that is, if they had been ready to pay a higher rate of interest, our investors might have bought more securities abroad. In this way it would have been decided by us to leave in Europe on interest balances due us, instead of asking for gold. On the other side, foreigners preferred to send us the gold rather than to pay the rates we exacted in bargaining for goods, or investments. Our excess of credits over debits allowed us to buy foreign goods, securities, or gold, according to our preferences; and we preferred gold. In other years we evidently chose differently.

The rate of interest at home and abroad, moreover, acts to regulate the flow of gold before it can appear to an excess in the reserves of banks. The imported gold first passes into the banks, we will say, of New York. The former proportion of

EXCESS OF GOLD AND SILVER EXPORTS AND IMPORTS.

¹ (00,000 omitted.)

	GOLD.		* SILVER.	TOTAL GOLD AND SILVER.	
	Exports.	Imports.	Exports.	Exports.	Imports.
1894	\$4.5	.....	\$37.2	\$41.7	.....
1895	30.1	.....	27.1	57.2	.....
1896	78.8	.....	31.8	110.6	.....
1897 .....	.....	\$44.6	31.4	.....	\$13.2
1898 .....	.....	104.9	24.2	.....	80.7
1899 .....	.....	.....	25.6	.....	25.8
1900	3.7	.....	21.4	25.1	.....
Total	\$117.1	\$200.9	\$198.7	\$234.6	\$119.7

* No imports.

reserves to immediate liabilities is altered; and if the banks wish to make use of the new gold as reserves they must increase their loans, probably by lowering the rate of discount. On the other hand, in the foreign banks from which the gold came (say London) the efflux of gold may have raised their rate of interest, for exactly opposite reasons. If the London rate of interest rose, securities bearing a fixed rate of interest would, of course, tend to fall. In due course of time American investors would find that low rates of interest and high prices of securities in New York were contrasted with high rates of interest and low prices of securities in London. There would thus arise among Americans having foreign credits a tendency to increase loans, or buy securities, in London; and an equilibrium between credits and debits would be brought about without a further movement of gold.¹ In this fashion the banking and business public of the United States would discover how much gold was needed, and when that amount was reached, at any particular moment, the flow of gold to this country would cease automatically. By the same machinery another country, like England, might obtain an increased supply of gold when needed.

Between great financial centers, such as Paris, Berlin, London, and New York, a distribution of capital is constantly going on through the machinery provided by the loan market and the rate of interest, as already described.

Granting an agreement to transmit a large capital, does it go in the form of goods, securities or gold? The actual process

¹ After writing the above, I found the following statement in the financial correspondence from London (*New York Evening Post*, August 29, 1901):

As for America, it is now believed in London that the ordinary trade balances in your favor this autumn will be again very large.

But as to a heavy gold movement in your direction, there is a good deal of uncertainty. It must not be overlooked that the increasing aggressiveness of American capitalists in our industries points to the probability of increased floating balances held for your credit here. As between this influence and the actual credits on merchandise account, the New York money market may be the deciding influence. Therefore the course of your money rates is being watched more closely even than the monthly export balances. If money at New York remains at its present easy figures, it is the rather general belief that you will not take gold.

may be seen by the following illustrations: (A) Suppose the capital is to be moved from London to New York. If the merchandise account is such as to give an excess of claims on gold in New York to London; that is, if American imports have exceeded American exports, there is an urgent demand in New York for bills on London, the price of exchange has risen nearly to the gold exporting point;—then the capital going to New York for investment is sent by transferring to New York London's claims on gold in New York through bills of exchange. The operation is that of simply leaving in New York the gold which would otherwise have been shipped to London. (B) Again, suppose the capital is to be moved from New York to London. If the merchandise account is such as to give to New York an excess of claims on gold in London; that is, if American exports exceed the imports, in New York the supply of bills on London is large, exchange is low, or near the gold importing point;—then, New York transfers the capital to London through bills of exchange by simply leaving in London the gold it would otherwise have withdrawn. (C) If the capital were to be moved from London to New York, and if New York still had an excess of claims on London, as in the last case, London would be obliged to meet not only its trade debit but also that for the capital to be transmitted. This would probably be met by an exportation of gold from England to the United States over a considerable period of time, until the obligations were canceled.

The movement of capital, then, in the form of loans or securities, only adds a factor in the general financial account to those already there which are together working to decide whether gold shall be sent or not.

Gold, consequently, may be sent to cover a simple trade balance. Or, when capital moves, in obedience to the rate of interest, for investment, it affects the financial account (including credits and debits not only for goods, but for all financial operations), and gold will be sent according to the final outcome of the account. Gold does not move in any such way as to produce a general change of prices.

9. It may be said¹ that, instead of affecting prices through actually entering the circulation, an influx of gold, in the modern banking system, would affect prices through raising bank reserves, and expanding the purchasing power which is offered for goods. To this it may be replied that, in legitimate banking, loans are made because of satisfactory collateral or actual transfers of goods, and not merely because reserves are high. To be sure, if reserves rise more loans are possible and rates of interest will fall; but merely because a bank can loan, it does not follow that it does loan. Loans are the evidences of transactions in property and goods; and only enough reserves are kept to properly and economically transfer these goods and property, under the penalty that, if the bank errs in valuing the security, the bank loses. If gold is pouring in beyond the needs of banking safety, the banks get rid of it, just as of any other asset which does not pay a return. If not needed in the reserves, to which it first flows, it goes into the arts (when not wanted for coins). The imported gold first passes into the banks, and only as much as is needed for legitimate business is retained. Gold in excess of business needs, it must be remembered, is a non-interest-bearing asset.

The existing stock of gold (about \$9,000,000,000 or \$10,000,000,000, of which less than \$5,000,000,000 are used in the monetary system of the world) is now so large that no restrictions on legitimate bank discounts can be assigned to the world's scanty supply of gold for reserves. When the war in the Transvaal broke out in 1899, it was supposed by some that the supplies of gold for the reserves of European banks would be curtailed. Two years later the American reserves had increased by \$150,000,000; those of the Bank of England by \$18,000,-

¹ If a country finds its banking reserve getting low, it seeks to "correct" the exchanges by raising the rate of discount. This relative rise attracts gold directly and indirectly tends to lower prices by checking advances, and thus, so far stimulates exports and diminishes imports. It is, by its effects on the banking reserves, that the passage of gold from one country to another has its principal influence on foreign trade — and it is only considerable in exceptional circumstances.—NICHOLSON, *Political Economy*, Vol. II, p. 292.

000; the Bank of France by \$100,000,000; the Bank of Austria-Hungary by \$43,000,000. The Bank of Russia, for special reasons, alone had lost gold. This outcome was not surprising. The explanation is to be found in the vast supply of gold not employed in the known circulation of all countries (nor in the arts), and held by institutions, or financial houses, not obliged to make public reports of their holdings of gold.

10. The rate of interest, the quantity of bank reserves, the price of exchange, merely form the present-day machinery by which gold is distributed throughout the commercial world to each country in the proportion of its needs of all kinds (monetary and non-monetary). The movement of gold follows, and does not precede the events which determine the course of international trade;¹ and hence it does not, in fact, raise or lower general prices, so that new exports and imports appear to restore equilibrium.

This ebb and flow of gold from one country to another does not affect the fundamental forces regulating the prices of products. In all cases, gold prices can be changed only by changing the relative values of goods and gold. A change in prices from causes affecting gold itself can take place only through such events as may alter its value throughout the world (by changes in the world's supply of, or the world's demand for, gold). A mere rearrangement of the existing stock of gold by transfer from one place of storage to another, would not, unless accompanied by a greater total demand than before, be sufficient to change the world-value of gold. If no increased amount of gold is needed in the annual transfers of goods in international trade, the shifting back and forth in payment of balances would not raise its value; that would follow only from a totally larger demand for such trade uses, as compared with the world's supply. The arrival of a gold balance in any one commercial

¹ The amount of gold sent by way of balance depends on the excess of the exports over the imports, and thus follows, and does not determine, the course of trade.—NICHOLSON, *ibid.*, Vol. II, p. 292.

country no more lowers the world value of gold in the markets of that country than would the price of the existing supply of wheat be lowered if one of the places of storing wheat should be changed from Chicago to Buffalo; for, if the existing demand for wheat and the existing supply of wheat remain unchanged, it is only a matter of convenience where it is stored. If the quantity of gold in a country be increased, without changing its world demand and supply, it would not produce any effect on the value of gold; it would not affect the value of the standard in which prices are expressed, and hence it would not modify the general price-level in that country.

Moreover, as clearly proven by the experience of England and the United States, the media of exchange by which goods are actually transferred within a country demand little, if any, gold, except for banking reserves. The fact is, that the volume of the media of exchange necessarily increases as the transactions out of which they arise increase; and it is equally true that great variations in the volume of the media of exchange may take place without producing any perceptible effect on the quantity of the standard money-metal used in domestic, or foreign, trade. But, on the other hand, the process of valuing goods in terms of gold does not in itself require more of the standard-metal. Unless changes in the volume of the "circulation" in any one country are such as to produce an effect on the world's value of the metal in which prices in the great trading nations are expressed, it is inconceivable that the level of prices in any one country should be changed.¹

12. It might be said, however, that there could be a temporary change in the value of gold in one country, due to violent trade convulsions, which did not extend to other countries; and that the value of gold would be different for a time in that country from its world value. If so, prices would be for a period

¹ The same general principles regulating the movement of gold and the level of prices between different countries apply equally to the movement of money and prices between different parts of the same country.

depressed, and gold would be imported to restore the equilibrium. Could there be a temporary scarcity of gold in one country? A case in point may be cited, in the history of the panic of 1893 in the United States, when there existed what was called a "money famine," and when gold was imported.

Such a situation would, even before the event, show itself in the rate of interest, and gold could be imported within a week. Granting the temporary scarcity of gold in such an emergency, the time could not be long enough before importation of gold to lower the general level of prices; it would be found usually that prices had fallen before the money-famine disclosed itself. This exceptionally high value set on gold was due to temporary business and banking conditions, and to the liquidation of obligations. In this case, the sudden demand for gold was disassociated from the movement of prices; the increased estimate put on gold in a panic could not have been the cause of a previous fall of prices.

To be sure, a fictitious rise of prices due to abnormal credit might temporarily give to gold a lower value within a country than it possessed elsewhere in the world; but these conditions bring their own overturn in such a vengeful fashion as to show that it is at variance with the natural principles of price-making. Such a rise of prices is not due to an increased quantity of the standard metal, but to the fiction of abnormal credit, or over-trading.

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